

# **2004 Annual Plan**

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Vermont Public Service Board  
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# **Efficiency Vermont**

*your resource for energy savings*



# Efficiency Vermont 2004 Annual Plan

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# **Efficiency Vermont 2004 Annual Plan**

## **I. INTRODUCTION AND OVERVIEW**

This Annual Plan for 2004 is submitted by the Vermont Energy Investment Corporation (VEIC) to the Vermont Public Service Board (PSB) pursuant to VEIC's contract with the PSB for delivery of "Energy Efficiency Utility" services under the name "Efficiency Vermont...your resource for energy savings."

This Plan serves three purposes:

1. to present Efficiency Vermont's strategies to address statewide markets in 2004 to secure savings and make progress toward achievement of other contractual goals;
2. to identify and describe specific, significant initiatives that are currently anticipated by Efficiency Vermont for implementation in 2004; and
3. to provide a current estimate of the budget associated with implementation of planned core services and initiatives.

Efficiency Vermont's plans for 2004 were developed over several months through an intensive planning process that involved the entire Efficiency Vermont Senior Management Team. Experience to date, including results of evaluation, quality assurance and feedback from customers and staff were all reviewed. Various indices of performance (\$/MWh, \$/MW, \$/TRB) were calculated, analyzed and compared at multiple levels (measures, groups of measures, delivered service) in the different markets that Efficiency Vermont has served. Trends were identified and projected forward. Market Briefs for key markets were developed by Market Strategy Teams. Ultimately, a range of options for 2004 and 2005 were developed, with corresponding costs and savings impact estimates. These were the subject of deliberation and prioritization by the Senior Management Team, with the final result being a portfolio of services and initiatives for 2004 that is reflected in this Plan and its associated budget.

Overall, the direction and strategies of the 2004 Plan can best be expressed in six "theme" statements that emerged from the planning process. These are described briefly below and are reflected in the more detailed description of plans that follow for the Business Sector, the Residential Sector, and for Efficiency Vermont as a whole.

## **A. THEMES FOR 2004**

### **1. Complete Transition to a Market-Based Orientation of Services**

Efficiency Vermont will complete the transition it began in 2003, moving from a program-based organization and management of efficiency services to a market-based approach. This re-orientation, first described in our Annual Plan for 2003, has been a significant and defining principle for our work in the current year, and we feel the results to date confirm the value of this approach. In 2004, we will build on the success of our 2003 efforts. We will refine and implement more cohesive approaches to markets, including refinements to marketing and business development strategies, customer communications, service offerings, and internal organization and management. This approach recognizes that there is a complex web of interactions and influences among the many market actors that affect efficiency decisions.

Therefore, our strategies are based on understanding how markets work, where and when routine activity in markets creates efficiency opportunities, and the role of various market actors. A key to this approach is working through other service and product providers (“strategic partners”) from engineering firms to hardware stores. We seek to understand how they interact with their clients and then focus on supporting them in ways that help them guide their clients to make energy-efficient decisions. Planning and implementing strategies with this approach typically requires the involvement of multiple organizational components of Efficiency Vermont, including Marketing, Business Development, Customer Service, Planning and Analysis, Operations and Information Technology, all working in teams. Together, these teams influence key market actors (e.g., architects, equipment vendors, lighting showrooms, trade associations, etc...) frequently addressing both the residential and business sectors.

### **2. Increased Emphasis on Lost Opportunities Relative to Retrofit**

The Department of Public Service May 2002 assessment of potential energy efficiency resources in Vermont found enormous opportunities in both retrofit and lost opportunity markets – many more opportunities in each market than Efficiency Vermont has the resources to address. Over the past several years, Efficiency Vermont has experienced increasing market demand for services in lost opportunity markets (e.g., new construction, equipment replacement, expansion/renovation, lighting and appliances). Lost opportunities have been prioritized over discretionary retrofit, both in guidance from the PSB since 1990 and in the agreements surrounding the establishment and contractual operation of Efficiency Vermont. With limited resources and market demand increasing for services in lost opportunity markets, Efficiency Vermont anticipates a substantial reduction in the level of 2004 resources available for retrofit services. The one exception to this will be retrofit services for low-income households, which will continue to be a priority.

### **3. Transition to a Market-Initiated Approach for Retrofit Opportunities**

With limited resources available for the retrofit market in 2004, Efficiency Vermont will move to a more market-initiated approach. In general, retrofit projects will be initiated and driven by customers and trade allies. Increased reliance will be placed on non-Efficiency Vermont market actors (e.g., equipment vendors, private energy auditors, engineers, contractors) to provide customer-paid services. Efficiency Vermont's role will be as a technical information and web-based marketing support resource for the market actors. In both the business and residential sectors, Efficiency Vermont will seek to rely more on cash-flow oriented financing of retrofit measures than cash incentives.

### **4. Expanded Range of Measures in the Lost Opportunity Markets**

As technologies develop and markets evolve, Efficiency Vermont will continue to identify new opportunities for cost effective savings in lost opportunity markets. For example, analysis of new market data on Vermont's growing use of residential central air conditioning has led us to the conclusion that there are important new savings opportunities to address in this market. Similarly, the development of "Super T-8" lighting creates significant new savings opportunities in the business sector. As is described more fully in the specific 2004 plans for each sector, Efficiency Vermont plans to address a number of new prescriptive and custom measures in lost opportunity markets over the coming year. Strategies that support energy efficient alliances with strategic partners will be formulated for development and implementation, including marketing, promotion, incentives and service delivery.

### **5. Increased Efficiency in Efficiency Vermont Internal Operations**

In 2004, Efficiency Vermont will be well-positioned to move out of a period of expansion, systems development, and capability building, to a period of operational refinement and increased internal efficiency. The process of identifying opportunities for increased operational efficiency has already begun and will continue to be a fundamental aspect of our operations. Examples range from time-saving IT system enhancements and increased range of prescriptive measures to staffing reorganization for greater efficiency. A systematic process will be implemented to identify further opportunities for operational efficiency, evaluate their costs and benefits, assess their impacts on quality and customer service, and prioritize their implementation.

### **6. Manage to Achieve Contract Goals**

Efficiency Vermont will continue to manage to meet or exceed all contractual goals, including savings goals and other contractual performance indicators. We will track progress toward all goals on a monthly basis. Based on results, experience and changing market conditions, we will make adjustments to strategies, offerings, and resource allocation, when and as necessary, to meet contractual objectives.

## II. FOCUSING ON MARKETS

In 2004, Efficiency Vermont will continue to address all the core markets identified in the PSB's Order in Docket 5980 and the associated Memorandum of Understanding (MOU) among the parties to that Docket. The reorganized categories under which these markets will be served will be similar, but not identical, to that instituted in 2003. These categories are as follows

### **2004 Business Sector Services and Initiatives**

1. Business New Construction
2. Business Existing Facilities
3. Business Targeted Markets
4. Customer Credit Program

### **2004 Residential Sector Services and Initiatives**

1. Retail Efficient Products
2. Residential New Construction
3. Residential Existing Buildings

The only change from 2003 in this organizational configuration is that beginning in 2004, the developmental initiatives that had been carried out under the categories "Residential Emerging Market Initiatives" and "Business Emerging Market Initiatives" will be integrated into the market categories listed above.

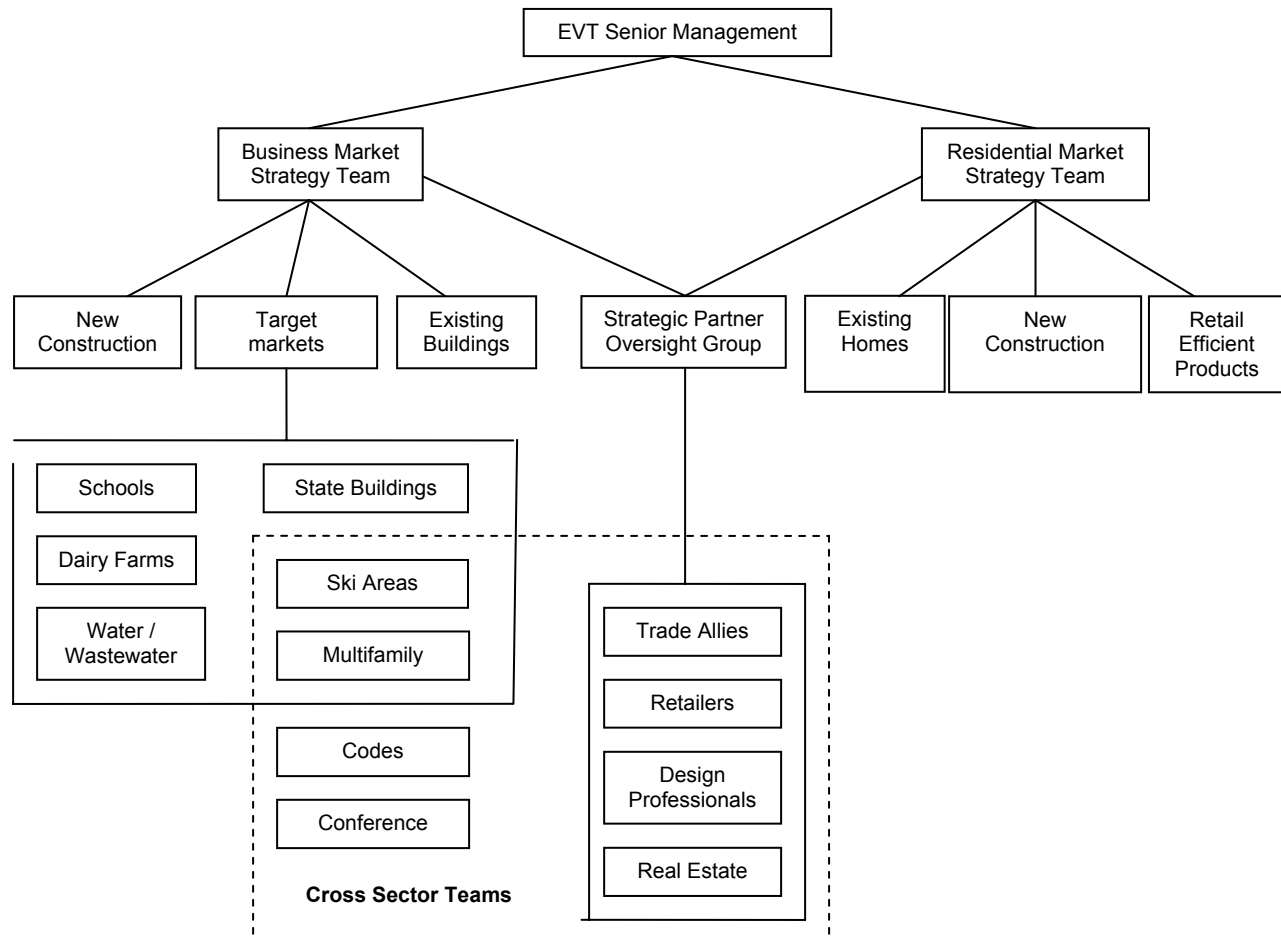
In 2003, the market-based approach was initiated to better align Efficiency Vermont services with customer and strategic partner needs. Our objectives in undertaking this new approach included simplifying customer and strategic partner participation, working more effectively throughout supply chains to impact energy affecting decisions, and eliminating gaps in services. Service gaps occurred when customers did not fall into the traditional residential or business segments, did not fit pre-conceived "program" definitions, or when strategic partners served a range of residential and business customers. The markets Efficiency Vermont seeks to affect are complex and dynamic. Understanding these markets, their particular needs, budget cycles, market actors and their interrelationships requires similarly dynamic approaches which are focused on and aligned with these markets. Efficiency Vermont has transitioned organizationally to this market-focused perspective by developing a team approach to better serve the breadth of the markets and more positively impact both customer and strategic partner energy efficiency decisions.

The chart on the following page illustrates the organizational structure designed to support this approach to markets. The two Market Strategy Teams, for business and residential markets, play a key role and include team members from across the organization including planning, operations, marketing, and business development. A Strategic Partner Oversight Group coordinates the activities of the various teams that



work with trade allies, design professionals, retailers and real estate professionals, because these partners often interact with both residential and business customers.

### Efficiency Vermont Market Team Structure



It is the role of the Market Strategy Teams to continuously assess opportunities in their respective markets, to monitor and learn from our experience, and to refine market intervention strategies. The other teams, addressing primary market segments (new construction, existing buildings, etc.) and addressing “targeted markets” (schools, State buildings, etc.) perform these same functions, but with more depth in their respective smaller market segments. Where markets include both residential and business energy applications (e.g., ski areas, multifamily housing), the “cross sector” teams include perspectives from both residential and business groups.

The activities of these teams will be discussed in more detail in the residential and business sections of this Plan, with the exception of certain cross sector activities which are described below.

## **A. CODES AND ACT 250 TECHNICAL SUPPORT**

In 2004, Efficiency Vermont will continue to provide both technical and training support on Vermont's energy guidelines and codes for both business and residential new construction. Given the 2004 anticipated changes to the Residential Energy Building Standards ("RBES"), Efficiency Vermont will be providing updated code materials to builders and design professionals as well as technical training to assist builders in complying with the updated requirements.

As Vermont pursues a sustainable method to provide code support services, there is a synergistic benefit from incorporating code support into the delivery of Efficiency Vermont outreach new construction outreach efforts. For example, training and education efforts with builders and design professionals can be structured to address not just minimum efficiency requirements, but also the rationales and technologies to go beyond minimums. These efforts also will be integrated, as appropriate, across the residential and business sectors.

## **B. STRATEGIC PARTNERS**

A significant focus in 2004 will be our continuing effort to develop and strengthen relationships with key agencies, industries, and associations throughout the state. We will continue to build strong relationships with trade allies, design professionals, real estate professionals, retailers, and others who influence energy efficiency decisions. We will be enhancing our Information Technology systems to share and track information among the Efficiency Vermont staff that interacts with these Strategic Partners. Additionally, we will coordinate our outreach and services between the residential and business sectors to provide more consistency and clarity for our partners.

A key component in the success of this effort will be the effective distribution of information that assists strategic partners in informing their customers about the benefits of energy efficient products, equipment, homes and buildings. To inform and support our strategic partners, we will develop and distribute project profiles of successful energy efficient equipment, systems, and comprehensive projects. Our efforts will focus on delivering relevant case studies to individuals in decision-making roles and on offering strategic informational and organization links on our website. In addition, we will be expanding the resources listed in the Marketplace section of the website to include information about strategic partners who have assisted others in energy efficient projects or purchases. This is expected to be a valuable resource for customers who are looking for firms who have experience with energy efficiency products, designs and services. We are currently developing the criteria for listing strategic partners on the Efficiency Vermont Marketplace web page.

## **C. CONFERENCE**

Efficiency Vermont presents an annual comprehensive conference on high performance residential and commercial new construction. The 2004 Better Buildings by Design

Conference will maintain and expand upon the success of the six previous conferences. This gathering of the top construction and design professionals in the Northeast is viewed as a key resource for information about the latest innovations in energy efficiency, superior building performance, and indoor air quality. The event is expected to draw more than 800 building and design professionals. In addition to its important educational aspect, the conference also provides an opportunity for Efficiency Vermont staff to build and strengthen relationships with many of the builders and designers in the state.

The 2004 conference will include nationally renowned speakers and workshop leaders and over thirty presentations on building envelope, integrated design, lighting, and mechanical systems. Featuring more than 45 exhibits of energy efficient products and services, the event also provides exceptional visibility for vendors and service providers.

This year, we will continue our expanded energy efficient design competition to include professionals as well as engineering and architecture students in Vermont undergraduate programs.

#### **D. REGIONAL AND NATIONAL ACTIVITIES**

In order to more effectively address various market needs and coordinate our services, Efficiency Vermont plans to continue to work cooperatively with and to participate in both regional and national initiatives and organizations. This includes participation in Northeast Energy Efficiency Partnerships (NEEP), Consortium for Energy Efficiency (CEE), American Council for an Energy Efficient Economy (ACE<sup>3</sup>), Residential Energy Services Network (RESNET), New Buildings Institute (NBI), and Affordable Comfort.

Efficiency Vermont also plans to continue to participate in at least six of the regional initiatives sponsored by NEEP: MotorUp, Cool Choice, Design Lights Consortium (DLC), Lighting, Appliances, and Building Codes. Participation in these initiatives will leverage regional resources in changing market practices. In 2003, Efficiency Vermont established key motor and HVAC vendor outreach activities, formerly conducted by NEEP representatives, to increase support and promotion of efficiency opportunities and strengthen trade ally relationships. These outreach and field delivery efforts will continue in 2004. For the Motor Up and Cool Choice initiatives, we believe the more limited approach taken by the regional effort and Efficiency Vermont's expanded outreach work with motor and HVAC trade allies will improve the benefits to Vermont from this initiative. In addition, we are currently evaluating a northeast regional Operations & Maintenance initiative to provide Building Operator Certification training in Vermont through NEEP's training contractor in 2004 and Vermont businesses have expressed an interest in this type of training. We will also monitor the NEEP high performance schools exchange clearinghouse effort.

Efficiency Vermont will continue to work with the Department of Energy and the EPA to promote increased awareness of the ENERGY STAR<sup>®</sup> brand, ENERGY STAR services, and the purchase of ENERGY STAR qualified products. We are investigating the

benefits of the Environmental Protection Agency's (EPA) ENERGY STAR qualified Buildings classification, which is applicable to existing construction over a range of commercial building types (e.g., schools, office buildings, warehouses). We will also continue participation in a national consensus-based effort to develop an ENERGY STAR qualification for large multifamily buildings.

Efficiency Vermont is actively participating with the New Buildings Institute in the development of the Advanced Building Guidelines. These guidelines will serve as a powerful resource to guide the design and construction of buildings that exceed energy conservation code requirements.

### **III. BUSINESS MARKET SERVICES**

#### **A. BUSINESS MARKET SERVICES OVERVIEW**

Efficiency Vermont continues to be extremely successful in collaborating with Vermont's businesses to improve their operations and bottom lines through energy efficiency. Our customized energy services have helped over one thousand Vermont businesses reduce their energy usage. In addition to custom projects, we have completed more than 1,000 prescriptive projects working with customers and vendors to increase the energy efficiency in market transactions for equipment such as lighting, transformers, and air conditioning units. Approximately 25% of the businesses we've served are repeat customers, with 80% of these repeat participants working with Efficiency Vermont technical staff on custom projects. In addition, we received a 60% return on our business customer surveys this year with about 94% positive feedback. This successful pairing of energy efficiency resources with the business market has resulted in increased customer and strategic partner demand for energy efficiency services.

Efficiency Vermont anticipates that we will complete 2003 with business sector savings and service delivery expenses in excess of what we had planned for the year. Our pipeline is rapidly filling with 2004 projects; we currently have projects with over 20,000MWh and \$2.5 million in incentives ranked as likely or definite for 2004. This enthusiastic participation by the business community provides us with the opportunity to reassess the levels of incentives we are providing and the areas we are targeting. Efficiency Vermont's plans for 2004 reflect our analysis of these opportunities, the needs of the market, and the necessity of managing our resources over the three-year contract period.

Efficiency Vermont's business market serves commercial, industrial, institutional, multifamily, and farm facilities and their operations as well as all of the strategic partners that interact with those businesses. As discussed earlier in this Plan, Efficiency Vermont has undertaken a reorganization to focus on market-based service development and delivery strategies. Begun in the fall of 2002, this change has improved Efficiency Vermont's ability to comprehensively serve business customers and respond to them within the context of their business settings and challenges. We have

increased our effectiveness in working with strategic partners, such as equipment vendors and design professionals, to expand and enhance the network of Vermont businesses that support energy efficiency. The early results of our market focus have put us in an excellent position to build on our past success in order to meet the diverse goals and metrics in the current contract.

In addition to the goals explicitly stated in the contract, we have established our own, long-term market transformation goals for the business sector. Long-term success in achieving these goals would mean:

- Vermont business market actors understand the benefits of energy efficiency and have a priority to achieve it;
- end-users demand energy efficiency from service providers (e.g., builders, contractors, etc.);
- service providers have the tools, expertise and motivation to deliver optimal efficiency;
- Efficiency Vermont is a valued asset to the business community;
- Efficiency Vermont is an efficient, effective and excellent resource for energy efficiency information and services; and
- energy efficiency is routinely incorporated in all energy-related business decisions.

Efficiency Vermont has developed market briefs for business new construction and existing business markets. Market briefs are under development for targeted sub-markets including ski areas, dairy farms, schools, state buildings, water/wastewater facilities, and multifamily buildings. These briefs are an evolving tool used to facilitate and document the planning and implementation of work necessary to achieve our goals in targeted market areas. They establish Efficiency Vermont's goals in the targeted market, analyze market opportunities and barriers, and delineate plans. Market briefs are dynamic. They will be updated periodically to reflect changes in market conditions, be responsive to Efficiency Vermont initiatives, and to incorporate new approaches and technologies. The briefs assist us in setting organizational priorities, identifying the resources needed to develop and implement market services, and ensuring coordination where market segments and market actors overlap.

Consistent with our market-based approach, Efficiency Vermont will continue to offer the following services and/or partnerships to maximize energy efficiency in lost opportunity markets:

- individualized technical assistance delivered to meet specific customer needs for all custom projects;
- design incentives for comprehensive new construction projects;
- partnerships with trade allies (vendors and installers) to leverage energy efficiency resources to customers;
- alliances with design professionals to move project design and construction towards greater comprehensiveness, achieving higher

- levels of energy efficiency in the Vermont built environment; and
- incentives to reduce the incremental cost of high efficiency options for new equipment purchase and new construction.

In response to the high demand for business services, Efficiency Vermont will be investigating areas to raise the minimum standards for participation, lower incentive levels, and shift away from retrofit-type incentives. We will continue to support retrofit projects based on our assessment of customer commitment and the involvement of strategic partners to support the customer activity. For example, we anticipate our services for retrofit projects will include individual technical assistance, cash-flow analysis as well as identification of, referral to, and packaging of financing resources. Unlike past retrofit incentives, these will be designed to address the incremental cost associated with higher efficiency equipment rather than covering a portion of the full cost (labor and materials) of equipment replacement. With the exception of the low income multifamily sector, Efficiency Vermont plans to minimize incentives for fuel switching, unless the project includes comprehensive energy efficiency upgrades (such as envelope upgrades, super high efficiency heating systems with excellent controls, etc.). In this case, we will target incentive levels at the incremental costs associated with the improvement package beyond a baseline fuel switch

High demand for Efficiency Vermont services also requires us to evaluate the use of our skilled project management and engineering staff. We are currently evaluating the custom project process from intake to closure. This will identify opportunities to improve efficiency and effectiveness, while continuing to provide customized services to address unique customer needs for energy efficiency services. One area of development for 2004 is an electronic e-binder that will contain end-use specific technical and cost information. This will streamline the information gathering stage of custom analysis.

Efficiency Vermont is also developing mechanisms to more effectively empower customers with limited resources to undertake the process of improving the energy efficiency of their facilities. We will be providing them with a clear path through the process, teaming them up with educated strategic partners so that they can develop their projects using existing market channels, and offering our services to capture the value-added energy efficiency opportunities. We will continue to emphasize direct outreach to strategic partners through one-on-one visits, targeted meetings and events. The development of our web-based resources for customers and strategic partners will also continue. In addition, Efficiency Vermont will be identifying and developing other resources to communicate the available opportunities and mechanisms that provide clear paths to energy efficiency in the business market.

Particular areas of the web site that will be created and/or enhanced in 2004 are:

- the “marketplace” where we will list qualified strategic partners such as auditors, vendors, and contractors;
- improved resources for small commercial customers to support them in efforts to reduce their energy bills; and



- technical information to assist trade allies in providing energy efficiency resources to customers.

Efficiency Vermont is continuing to promote the application of new technologies and designs as they are developed and proven. This includes review of, and participation in, the work of other regional and national organizations to ensure we are promoting the most appropriate efficiency technologies and applications. As stated earlier, participation in regional and national initiatives will be continued where aligned with Vermont's market strategies and strategic interests. This participation will benefit Vermont's businesses by leveraging the work of others and providing a regional market approach.

Our successful collaboration with the business sector provides an excellent opportunity to further refine and develop Efficiency Vermont's services and approach. In 2004, we anticipate continued increase in participation levels in lost-opportunity markets and are driven to meet the challenges posed by the market's increased response to our efforts.

## **B. BUSINESS NEW CONSTRUCTION**

The construction of new buildings provides a unique opportunity to embed enduring energy efficiency in Vermont's built environment. Vermont has a network of design professionals committed to teaming with Efficiency Vermont in order to bring better buildings to their customers and the state. We have been extremely successful in establishing partnerships with both the design community and building owners to increase the efficiency of new buildings. This success has resulted in high levels of participation in our comprehensive track, which includes interactive analysis of efficiency measures and design incentives to address the incremental cost of designing high performance buildings. Comprehensive interactive analysis of building systems and performance options is relatively new to Vermont. Because many practitioners lack experience with this approach, a high level of investment by Efficiency Vermont is required in energy analysis, customer and design team support, communications, and incentives. However, these investments are paying off. We currently have more than ten comprehensive new construction projects slated for completion in 2004, with an expected \$350,000 in incentives and 2,000 MWh savings. Building owners and the design community value Efficiency Vermont as a project team member and are increasingly seeking our assistance in new construction and major renovation projects. Efficiency Vermont is committed to capturing maximum levels of cost effective efficiency in this critical lost-opportunity market.

As with the business market as a whole, we broadly define the new construction market to include new construction, major renovation, and tenant fit-up. The diversity of building types, market actors, and approaches to construction in the business market is striking; our market approach and our customized project services enable us to meet the unique needs of each new construction customer we serve.

Efficiency Vermont's overarching goal in this market is to have every new construction project in Vermont achieve the highest cost effective levels of energy efficiency. The

primary strategy is to effectively engage with all the principals (architects, engineers, developers, building owners, etc.) on their new construction projects. We will then assist them in setting project performance objectives and collaborate with them during the design and construction process to provide resources that will enable achievement of the project performance goals.

In order to achieve our contract and market-based goals, we are continuing to provide the following new construction services:

- Customized comprehensive design assistance integrated with the design team's work to maximize impact and effectiveness;
- Incentives to help overcome the incremental cost of additional design work necessary to optimize building performance and capture the interactive benefits of energy efficiency measures in the design;
- Review of architectural and engineering plans and contractor designs coupled with consultation on energy efficiency opportunities;
- Energy analysis of buildings and measures, generally done at the comprehensive level with whole building modeling or on a system basis;
- Financial incentives toward the incremental cost of building energy efficient facilities; and
- Direct outreach for enrollment of new construction projects listed weekly on Works in Progress or in the Act 250 Agenda comments, as well as with design professionals and trade allies.

Efficiency Vermont will continue to refine our comprehensive design assistance service to increase the number of buildings served with a more integrated approach. We will also streamline the process to reduce the labor required both by design professionals and Efficiency Vermont technical staff. This approach provides a method for achieving a higher level of energy efficiency by optimizing the interactive benefits between various building systems and the whole building. Under Efficiency Vermont's first contract, the introduction of the comprehensive design track envisioned two clearly defined approaches – one simple, relatively prescriptive approach and one “enhanced” approach that included full building modeling by a third party. Our experience has shown that the optimal approach to cost effectively maximizing interactive benefits lies somewhere between these two tracks. Addressing this, we have developed a third “track,” which we will be refining and expanding in 2004. With this third path, there will be a single path for comprehensive design participants with a number of options. Efficiency Vermont has been providing lower incentives than what many other initiatives provide for comprehensive design, and we have been successful at leveraging significant levels of investment in participating projects. In response to input from design professionals, we are developing training on the “Vermont High Performance Design Guide” which, coupled with the New Buildings Institute's “Advanced Building Guidelines” will provide these professionals with clear alternatives and accessible tools to support selection of integrated design approaches during the design process.



Early evaluation of Efficiency Vermont indicated the strength of our relationships with design professionals has been critical to our success in establishing efficiency as an obtainable objective for the new construction market. Efficiency Vermont's relationships with individual professionals and design firms have resulted in higher levels of engagement during the design process and a significant number of well-qualified project referrals. We expect to continue and expand these outreach activities throughout 2004. We are continuing to develop our partnerships with individuals, firms, and associations in the building design community. For example, we regularly meet with the leaders of the local AIA chapter, members of Efficiency Vermont's staff hold leadership positions in the local ASHRAE Chapter, and Efficiency Vermont's value was recognized by an award from the Construction Specifiers' Institute. All of these groups, and more, actively support, participate in, and value our annual Better Buildings by Design Conference. They have also provided us with direct feedback about the needs they see in the marketplace and our approaches. It is based on their feedback that they needed better reference materials that The Design Guide and Advanced Building Guidelines were established as priorities. During 2004, we will continue development and roll-out of these important tools.

An important update planned for 2004 is the established baseline assumptions for Act 250 new construction projects. In order to better estimating efficiency savings, Efficiency Vermont is working with the Department of Public Service to establish the next generation of agreed upon new construction baselines both for Act 250 and non-Act 250 new construction projects. In addition, we will be evaluating incentive eligibility requirements to maximize our ability to leverage high levels of cost effective energy efficiency within the constraints of the budget.

Project developers who work with contractors and vendors for system and building design often have less available information regarding efficient options and a shorter timeframe from conception to occupancy. In 2004, we will be working to improve our engagement on these "design-build" new construction projects. The increase in Efficiency Vermont's outreach to the trade ally network, in particular air conditioning and lighting vendors and installers, should help increase participation and energy efficiency in these smaller, fast-paced projects.

Another avenue for improving the consideration and incorporation of energy efficiency measures is ensuring that technical assistance is readily available to new construction design teams. With the proper tools, design professionals and contractors can join us as allies in promoting energy efficiency. The Guides we have described above will empower design professionals to more easily provide their clients with energy efficiency resources. In order to support the design-build community, we will identify simplified resources that will allow them to quickly review energy efficiency options with customers. These tools will help Efficiency Vermont serve more customers who have limited technical staff resources available. We will also continue to develop "project profiles" that can be used by design professionals and design/build contractors to differentiate themselves in the market and promote their services as partners for energy efficiency.

Over the next year, Efficiency Vermont will continue to build on our extremely successful relationship with design professionals, while also working to expand that model to include design build contractors. We will respond to the high demand for comprehensive design services with program delivery modifications and the development of resources for design professionals to use in partnership with us. We will be engaged in a significant portion of the commercial new construction market, and are eager to continue our success in this critical market segment.

### **C. BUSINESS EXISTING FACILITIES**

Demand for energy efficiency services from Vermont's existing businesses continues to increase. Efficiency Vermont has established itself as an effective provider of customized services and the business network in Vermont is small and responsive. An example of the close communication within these networks occurred during a project to improve the energy efficiency and quality of a cheese manufacturer's cooling process with the use of a "cheese cave." Efficiency Vermont was able to assist this customer to find low cost solutions to some of their energy needs and, as a result, we received projects from several motivated small cheese manufacturers in the state.

Energy costs continue to be a concern to Vermont's businesses. Many of these businesses are motivated to work with Efficiency Vermont to manage their energy usage and improve their bottom line while helping the environment. In order to most effectively serve existing businesses, we will engage with them on the work they are undertaking to improve their facilities and operations. We will assist them in leveraging their planned investments to maximize energy efficiency within their businesses. Three of Vermont's four largest electrical customers have given us direct feedback that this is the area in which they want to engage with us. These electrical customers have had energy audits and retrofit proposals, but have determined that where planned equipment replacement and process upgrades are critical to their ongoing success, upgrades for "energy cost reduction only" are not a high enough priority within their business operations.

Diversity is a defining feature of Vermont's existing businesses - from dairy farms to large manufacturing, from the corner store to large chain retailers, from schools to state buildings, from multifamily dwellings to hospitals. In these businesses, the size, operational complexity, appropriate technologies, and the process for getting work done, varies widely. Efficiency Vermont's market-based and customized approach puts us in the best position to meet the diverse needs of our business customers. In addition, our work with strategic partners, targeted markets and individual large customers allows us to participate in projects as they are happening. As businesses make sales and install equipment, our prescriptive forms empower strategic partners to work with us more effectively in providing customers resources for energy efficiency.

Efficiency Vermont's overarching objective for this market is that Vermont businesses understand the value of energy efficient solutions and incorporate them into all aspects of business operations. In order to move towards that objective in 2004, we will be

working to increase participation through our trade ally network (vendors and distributors and installers of energy efficient equipment and systems), increasing our understanding of and response to targeted markets, and continuing our direct outreach to large customers to maximize energy efficiency opportunities as they occur in the market.

In support of our contract and market goals for Vermont's existing businesses, we will continue to provide the following services:

- Engaging with customers and trade allies on a project specific basis in order to provide custom technical and financial assistance to best address the barriers to energy efficiency;
- Providing prescriptive incentives and supporting documents to enable trade allies to effectively provide and promote resources that will enable customers to select the most cost effective energy efficiency options when replacing or upgrading equipment. Prescriptive incentives are offered currently, and are anticipated to continue in 2004, for:
  - lighting
  - motors
  - unitary HVAC equipment and economizers
  - vending machine controls
  - LED traffic signals
  - small refrigeration systems
  - transformers
- Providing walk through assessments for qualified customers; and
- Offering vendor and auditor referrals to enable customers to undertake early planning for equipment upgrades in the marketplace.

Efficiency Vermont continues to expand our "in-reach" to the trade ally network and envisions that expansion as a primary market activity for 2004. We have developed small commercial refrigeration prescriptive forms and will be working with our network of trade allies to deliver this new approach for small commercial customers next year. We will also be building on our earlier work with HVAC vendors and installers to garner higher levels of energy efficiency and increased participation in this important end-use area. This will ensure maximum peak demand impacts as well as energy savings. Early meetings in 2003 with both of these groups indicated that they value the resources Efficiency Vermont offers to help them improve their services and ability to sell some of the higher-priced energy efficient equipment.

In order to respond to market changes and newer technologies, we will be working on improving and refining our prescriptive lighting track. "Super T-8" technologies present one of the most promising next levels of opportunity with indoor lighting. We will be working with the trade ally community to ensure that equipment is available, minimum standards and specifications are understood and widely accepted, and that the challenges and benefits are comprehended so that they can be effectively communicated with customers. Transitions of the lighting offerings will be carefully

undertaken to build on Efficiency Vermont's past success and effective education and outreach with trade allies. This will ensure that we do not lose momentum or credibility with this important market sector. Also particularly important is not to under serve small businesses, as existing T-8 lighting participation among this critical group has been significant.

In 2004, Efficiency Vermont will begin implementation of a market-initiated approach to the retrofit market. This change is necessitated by the high levels of incentives required to leverage a business to make investments in energy improvements that are not seen as core to the business operations. We will honor our current incentive commitments as well as commitments made during the development period for in-progress retrofit projects, many of which will be completed in 2004. We anticipate that once the new approach is developed, incentive offers for retrofit projects will be lower. These lower incentives will be more consistent with those offered for lost-opportunity projects, addressing only the incremental cost for the higher efficiency equipment above standard practice baseline efficiency for new equipment. Certain targeted markets and special circumstances may be needed to maintain higher levels of retrofit incentive funding, and will be evaluated individually. Efficiency Vermont plans to use financing and cash-flow analysis, along with customized technical assistance tools, to help address market barriers to retrofit investments. In addition, to better manage Efficiency Vermont's risk and ensure we have the resources available to address customer class and geographic equity objectives, we will be implementing limits on custom incentives.

Outreach materials will be developed to help promote our partnering relationships with our trade allies on prescriptive and custom projects. These include a listing in the "Marketplace" on the Efficiency Vermont website, affiliation window stickers, project profiles, and other customized materials to address specific trade ally needs. An example of customized materials is "Opportunities for Refrigeration Cost Savings" - a fact sheet Efficiency Vermont developed to help customers and trade allies understand the efficiency opportunities when upgrading refrigeration systems and improving product quality. In addition, there are many small business customers who need help understanding their facilities and the energy efficiency opportunities that would help them improve their business. We will be looking at improving the resources we have to offer that will empower these customers to move forward with facility upgrades and take advantage of our services.

Plans for 2004 include re-evaluation of incentives, minimum eligibility criteria, and baseline assumptions for measures such as VFDs and snow-making tower guns. We will also be investigating the application of new technologies, including evaporative condensers, to capture efficiency opportunities. The adjustments to baselines will be coordinated with the DPS, and incentive level changes will be made as appropriate.

In 2004, we will continue to target the critical manufacturing pulp and paper industry by using our technical brief, direct outreach, and work with equipment suppliers to garner higher levels of efficiency. We will also be expanding our focus on Colleges and Universities to ensure that energy efficiency activities currently being undertaken by the

Sustainable Jobs Fund and Renewable Energy Vermont are coordinated with Efficiency Vermont's activities with those customers.

In partnership with the Vermont Environmental Assistance Partnership (VEAP), Efficiency Vermont has received USDOE funding for Vermont Industries of the Future. Members of the Barre Granite Association have been selected as a targeted industry for the first phase of this project. We will investigate opportunities and develop a plan to improve the efficiency of their operations from an energy and environmental perspective.

Efficiency Vermont will continue striving to better serve all segments of the existing market, while placing special emphasis on small customers. We will continue to maintain a strong technical assistance delivery approach for all projects, including retrofit. We will place special emphasis on leveraging outside resources, as well as increasing our capability to provide energy efficiency services within Vermont's existing market actor infrastructure. This will include building stronger working relationships with trade allies, with particular emphasis on HVAC and refrigeration and lighting contractors and suppliers. While prescriptive incentives accommodate a high volume of participants, the majority of the savings garnered from existing buildings are expected to continue to come from custom projects. We have identified and will target strategic customer sectors with high energy use and efficiency opportunities.

#### **D. BUSINESS TARGETED MARKETS**

Since 2001, Efficiency Vermont has targeted specific business markets for focused assistance and activities. Under the "program" organization of the prior Efficiency Vermont contract, these specialized facility and business types were addressed within the "emerging market initiatives" program. Since 2001, we have developed critical understanding of numerous targeted market areas, including their opportunities and barriers to implementation of energy efficiency, significant business and trade organizations serving the targeted market, and key design professionals, trade allies, and other market actors. Our long-term commitment and participation in these markets has created a foundation of mutual respect and trust, upon which Efficiency Vermont has built positive working relationships among market actors. In many cases, members of Efficiency Vermont's staff have joined relevant, market-specific trade and business organizations. By becoming an integral part of the targeted market community, we have increased our knowledge of the market and are better able to meet customers' needs and provide them value-added services. In fact, based on the value and benefits of our outreach efforts and assistance with water and wastewater facility improvement projects, the Green Mountain Water Environment Association, a Vermont member organization serving water and wastewater facilities and operators across the state, awarded Efficiency Vermont its "2003 Corporate Sponsor of the Year" award. Another organization, the Vermont Department of Education and the Vermont Superintendents Association, routinely contact us to ensure that we are aware of school construction plans and projects. The Vermont Ski Areas Association also recognizes Efficiency Vermont and our services to be of significant value, and urges all its members to contact us for assistance on any type of construction or upgrade project. By



understanding the unique barriers and challenges that particular market segments face, Efficiency Vermont has a positive impact on major State industries and businesses, improving their economic well being while enhancing their facilities and saving energy.

Business market initiatives address important targeted markets with commonalities such as end-use and operating structure. These initiatives include new construction and existing business activities. In some cases, such as ski areas, dairy farms and multifamily, targeted markets span business and residential sectors. Internal teams have been established to strategize and coordinate activities for targeted markets. Specific targeted markets that will be addressed in 2004 include:

- Ski Areas
- Dairy Farms
- Schools (public and private K-12)
- State Buildings
- Water/Wastewater
- Multifamily Buildings

These markets have been selected on the basis of their importance within Vermont's economy, their significance within communities, their ability to enhance geographic and demographic equity in distribution of efficiency benefits, and their potential for electrical energy savings. Our efforts focus on understanding and addressing the needs and challenges of each targeted market in a comprehensive and integrated fashion. For example, we assist ski areas with facility improvements, process upgrades (e.g., snow-making), residential construction (e.g., condominiums), and promoting their work in capturing the environmental benefits of energy efficiency.

All of the business market initiatives include outreach components to relevant trade and business associations, facility engineers and managers, and project decision-makers. Targeted markets where outreach activities are extensive include ski areas, water/wastewater facilities, schools, and state buildings. Often, presentations and training are used as ways to inform key market actors of the value of efficiency improvements. These presentations also enhance their professional skills and knowledge base. Other outreach activities include trade show displays, web development, material development and distribution of case studies, and technical briefs. Developing partnerships with trade organizations can also result in the creation of a strong, credible advocate for energy efficiency within the targeted market. Efficiency Vermont has established a strong, positive working relationship with the Vermont Ski Areas Association (VSAA), and now, the VSAA advocates to its member ski areas the compelling reasons to evaluate their energy use and implement cost effective improvements.

In some cases, data collection and analysis are used as ways to improve our understanding of targeted markets, and to validate the electrical and cost benefits of specific efficiency measures.

In addition to initiatives for targeted business markets, we will pursue business market initiatives focused on the development of productive working relationships with key, non-customer market actors, such as design professionals and trade allies. In 2004, the “Strategic Partners” effort begun in 2003 will continue, and focus on

- Design Professionals (e.g., architects, engineers)
- Trade Allies (e.g., vendors, distributors, contractors)
- Retailers
- Real Estate (e.g., property managers, investor/developers)
- Business Associations

Work with strategic partners will serve as the foundation for development of strategies for how best to integrate Efficiency Vermont services with ongoing activities throughout business markets.

Objectives and work in these targeted markets will be consistent with the themes of increased lost opportunity participation, support of a market-initiated approach to retrofit, and improved effectiveness at addressing market barriers. Efficiency Vermont will continue to develop and maintain relationships with associations and agencies that interact and serve these specialized markets. Specific objectives are identified for each targeted market, which are also aligned with general business market goals. Services will be developed and changed as needed, based on the available resources and the market response to our initiatives. Business markets are dynamic, and our market-based approach allows us flexibility to change our services and approaches in order to respond to market conditions, lessons learned, and market constraints.

Efficiency Vermont’s services for new construction and existing businesses will continue to be available to businesses within targeted markets. Additional specialized market services available in 2003 are expected to continue in 2004. For instance, we will continue the dairy farm low-interest financing service established by Efficiency Vermont in collaboration with the Vermont Development Credit Union. This service provides low-cost financing options to dairy farmers for energy efficiency upgrades. Efficiency Vermont will also continue to evaluate opportunities for pilot scale demonstrations of new technologies, systems, and approaches, especially for water and wastewater facilities. Finally, some business services that are being scaled back may continue to be available in specific targeted markets.

Promotion of “Super T-8” lighting will be aggressively pursued within targeted markets like schools and state buildings, in order to begin transforming the business market from installation of standard T-8 lighting to the improved “Super T-8” lighting systems. In the state buildings sector, we will work with Buildings and General Services to identify other technologies that have wide-spread applicability and associated large potential energy and cost savings. We will also promote installation of advanced technologies (such as foam insulation and heat recovery from domestic hot water) in affordable, publicly funded, multifamily housing, especially in new construction and major renovation projects.

Business Market initiatives integrate and capitalize on regional and national partnerships. For instance, the water and wastewater targeted market has ongoing collaboration with many water and wastewater groups, including the Green Mountain Water Environment Association, the New England Water Environment Association, the Northeast Rural Water Association, Vermont Technical College, Vermont League of Cities and Towns, Consortium for Energy Efficiency, and the Alliance to Save Energy. Working with larger organizations and initiatives allows us to optimize our efforts by taking advantage of what works and eliminating ineffective strategies. In many cases, Efficiency Vermont has become a recognized and valued member of these organizations

Efficiency Vermont's market-based approach to service development and delivery allows more effective market transformation and market penetration of energy efficiency measures. We are able to achieve successful implementation of comprehensive efficiency measures, develop strategic resources and approaches to maximize participation in targeted markets, and address the barriers to long-term market adoption of more energy efficient practices.

#### **E. CUSTOMER CREDIT PROGRAM**

Efficiency Vermont will continue to offer the Customer Credit Program. Program modifications are currently under consideration by the DPS which, if adopted, would provide additional flexibility for Customer Credit Program participants in 2004.

### **IV. RESIDENTIAL MARKET SERVICES**

#### **A. RESIDENTIAL MARKET SERVICES OVERVIEW**

In 2004, Efficiency Vermont's Residential Market Services will be well positioned to expand the scope of services offered and to improve the efficiency of our service delivery. Efficiency Vermont's plans for 2004 will also continue the integration of discreet services into residential sector-wide services. These services will flexibly address the opportunities and needs of residential consumers from the customer's perspective. This integration involves both internal reorganization and the establishment of cross-market and cross-functional teams to develop and implement services.

One change in emphasis in 2004 will be a greater focus on lost opportunity transactions (e.g. equipment replacement, new construction-renovation, lighting and appliances), including a shift in the balance of resource allocation to lost opportunities from discretionary retrofit services (e.g. fuel switches, early appliance retirement, etc.). This change is driven by the need to prioritize the resources available to Efficiency Vermont. The provision of retrofit services will continue to be a priority for low-income households. For non-low income households, Efficiency Vermont will be more reliant on customer-



initiated and customer-driven services, as well as cash-flow oriented financing of retrofit measures in place of cash incentives for these discretionary efficiency opportunities.

Another change for 2004 is the elimination of the “Residential Emerging Markets” designation and organizational umbrella for new service development. Efficiency Vermont will continue to investigate, evaluate and develop both new services and improvements in service delivery. However, this development work will be integrated into the existing homes market services rather than be separate from the broader residential market sector. Some of the specific development activities planned for 2004, described in more detail later, are:

- the introduction and promotion of financial incentives for the installation of ENERGY STAR central air conditioning and forced air heating systems utilizing energy efficient fan motors;
- the bundling of ENERGY STAR qualified products (e.g., combining incentives for lighting and appliances for a kitchen remodeling project that includes thermal shell improvements) that are applicable for home remodeling/renovation projects and outreach to renovation/remodeling contractors; and
- the development of the “Home Performance with ENERGY STAR” model to address residential retrofit opportunities.

Efficiency Vermont’s core services will continue to address the broad needs of residential customers, e.g. customer service support for customer inquiries, informational and educational materials and brochures, meter loan services, participation in community events, web-based resources, energy audit CD, and on-line access for the purchase of efficient lighting products. Plans for 2004 include enhancing these services through the development of additional informational materials/brochures and website enhancements as well as redesigning current materials and documents to provide clearer communications and greater value to our customers.

Our successful strategy of promoting ENERGY STAR qualified products will be continued and expanded through the promotion of a broader range of ENERGY STAR qualified products and services, plus continued support for retailers’ and trade allies’ efforts to build on the ENERGY STAR brand.

Throughout Efficiency Vermont’s operations, we will be applying a systematic process to identify, evaluate and prioritize opportunities for improving our operational efficiencies. These opportunities are expected to include:

- internal systems improvements, such as time-saving IT system enhancements and streamlining of administrative and record-keeping functions;
- elimination of unnecessary data collection;
- staff skill development;

- organizational management structure modifications;
- identification and reduction of redundancy; and
- examination of subcontracted processes and operations, including consideration of alternatives to rebate and/or coupon processing and streamlined delivery of services by subcontractors.

## B. RETAIL EFFICIENT PRODUCTS

Efficiency Vermont's ultimate objectives in this market are to reduce barriers in the manufacturer-distributor-retailer-consumer supply chain. This will influence consumer's purchase decisions and enable them to buy ENERGY STAR products more frequently and for more applications. Adopting the national ENERGY STAR brand as the basis for our Retail Market efforts not only increases consumer awareness of energy efficient products, but it also supports their confidence in the effectiveness of energy efficient products. This will ultimately result in better-informed consumers who are motivated to demand and choose energy efficient products.

Our objectives in 2004 are to secure significant energy (kWh) resources *and* continue efforts to permanently transform this market. To address our market transformation objectives, we will continue to focus on mechanisms which will support the long-term transformation in Vermont's network of lighting and appliance retailers, together with the wholesale suppliers and players in their product supply chain. At the same time, through strategies to create consumer demand and overcome first-cost purchase barriers, we will seek to address near-term market barriers of ENERGY STAR qualified products. In addition, we will seek to lower operational costs through increased operational efficiency. Our key strategies for 2004 are:

- strengthening and expanding our relationships with retail and wholesale vendors of energy efficient products;
- promotion of all ENERGY STAR qualified products to increase consumer recognition of and confidence in energy efficient products;
- continued financial incentives for selected ENERGY STAR qualified products;
- participation in and support for regional and national initiatives that have an impact on manufacturers' product design decisions and upon retail chain purchasing, pricing and promotion of ENERGY STAR qualified products; and
- systematic review of opportunities to improve our operational efficiency.

Each of these areas is discussed further below:

- **Retailer Support** - Our marketing support for retailers of energy efficient products has been well received and judged to be very effective. Our continued retailer support will take many forms: consumer or retailer/manufacture incentives; point-of-purchase

consumer information; financial support for cooperative advertising; training for retail sales personnel; and financial incentives to targeted vendors and manufacturers to increase the availability of specific energy efficient products. In addition, Efficiency Vermont plans to support individual retailer's efforts to promote the sale of ENERGY STAR products through the creative use of retail displays and websites. We will also continue to strategically support retailer events.

- **Financial Incentives** - We will continue to provide financial incentives to customers for the purchase of ENERGY STAR qualified bulbs, fixtures, and clothes washers, with seasonal promotions of air conditioners, ceiling fans and refrigerators. The dollar amount of these incentives and the duration of the promotions may be adjusted during the year to reflect changing market conditions, such as product availability and retailer pricing.
- **Expanded Product Focus** - Given the broad applicability and cost effectiveness of compact fluorescent lighting ("CFL") technology, Efficiency Vermont's plans for 2004 include increased efforts to reach those residential customers who have yet to purchase a CFL. We also plan to expand our support to include a broader range of ENERGY STAR qualified products and to help introduce newly qualified products. For example, ENERGY STAR qualified freezers were introduced in 2003; however, no Vermont appliance retailer has yet chosen to stock these models. Through our retailer support, we have begun to make retailers aware of our interest in supporting these energy efficient freezers by offering to provide consumer incentives. These incentives will encourage retailers to stock this newly qualified ENERGY STAR product.

In addition, as resources allow, Efficiency Vermont will consider increasing promotion of other ENERGY STAR qualified products, such as TV's and audio and electronic products. Although the result of these efforts are not expected to produce large energy savings, such promotion is expected to increase consumer awareness of energy efficiency and the ENERGY STAR brand as well as to support retailers and manufacturers in actions that will result in greater market transformation.

- **Industry Initiatives** - During 2003, Efficiency Vermont participated in a limited number of retailer/manufacturer buy-down offers. In 2004, we plan to work with these industry partners to expand the number and variety of these buy-down offers. These buy-downs represent a transformation throughout the supply chain by using the incentive to influence the manufacturers' and retailers' decisions. Retailer/Manufacturer buy-downs also have the potential to produce even lower retail pricing for consumers and to improve the efficiency of

Efficiency Vermont's operations by reducing coupon redemption and processing costs.

- **Operational Efficiency** – In addition to the efficiency improvements in the coupon processing identified above, Efficiency Vermont will also be examining our internal processes (e.g. data processing of prescriptive measures), to identify opportunities to improve our operational efficiency.

### C. EXISTING HOMES

Existing Homes is the market designation for the services of Efficiency Vermont that provide education, technical assistance, and incentives to enable Vermonters to reduce the use of energy in their homes.

For 2004, Efficiency Vermont's plans are to broaden the scope of Existing Homes services and make them more comprehensive through:

- the development and initial implementation of "Home Performance with ENERGY STAR;"
- the delivery of efficiency services in conjunction with remodeling/renovation projects; and
- the introduction of incentives for the installation of ENERGY STAR central air conditioning and forced air heating systems utilizing high efficiency fan motors.

These new services represent Efficiency Vermont's shift in resources from focusing on discretionary retrofits to greater support for transactions that represent lost opportunities.

We will continue our emphasis on low-income customers by coordinating our service delivery with the agencies that deliver the Weatherization Assistance Program to eligible households.

In 2004, our services for owners and renters of existing homes will include:

- **Technical Customer Assistance Services** - We currently serve as an expert resource, by phone and e-mail, to homeowners and renters with a range of energy efficiency questions. Because the most frequent residential inquiry is about the causes of high energy bills, we provide tools to help analyze electrical usage. Those tools include simple, plug-in energy consumption meters (a loan service), a home energy use survey with telephone technical assistance, and a computer CD (or on-line software) that enables residents to conduct their own home energy audits. In 2004, we plan to continue the expansion and broadening scope of these services by developing additional printed information materials, website

enhancements, and an expansion of the technical resources available by phone to residential customers.

- **Low-Income Services** - Working in partnership with the state's low-income weatherization agencies, we will continue to provide incentives for the implementation of electric efficiency measures in low-income households. Measure identification and installation is primarily delivered through the integration of electric efficiency services with weatherization services to recipients of the Weatherization Assistance Program. These services include technical assistance and financial assistance to qualifying homeowners, renters, or rental property owners for cost effective:
  - installation of energy efficient lighting and water conservation products, when appropriate;
  - selective replacement of inefficient refrigerators and freezers with ENERGY STAR qualified models; and
  - conversion of electric water and space heating equipment to fossil fuel fired systems.
- **Home Performance with ENERGY STAR** - In 2003, Efficiency Vermont started the development of the Home Performance with ENERGY STAR service by initiating the training and certification steps needed to develop a network of trained and certified contractors able to provide comprehensive diagnostic and retrofit services.

Our plans for 2004 include the continued development and implementation of this service. This involves providing:

- training and certification to interested contractors; and
- targeted incentives or financing to customers with cost effective efficiency improvement opportunities so they can pursue retrofit services delivered by Home Performance certified contractors.

In its early stages, the service will be introduced through the existing residential high use services being delivered by Efficiency Vermont (see below), but over time will transition to a market-based service, driven by customers and energy-improvement contractors.

- **High Use Household Services** – It is anticipated that services to homes with high bill histories and cost effective opportunities for efficiency improvements will increasingly be served through the Home Performance with ENERGY STAR mechanism. In the interim, and continuing through the year at a decreasing level, Efficiency Vermont will continue to offer direct services as follows:

- technical assistance in identifying and evaluating efficiency opportunities;
  - assistance in securing financing for cost effective measures, including referral to energy efficiency loan programs offered in partnership with Efficiency Vermont;
  - limited offers of financial incentives to motivate customers to undertake the installation of efficiency measures;
  - direct installation of energy efficient lighting and water conservation products, when appropriate; and
  - contract management services to facilitate the installation of these measures.
- **Remodeling-Renovation Efficiency Services** - Market assessments and evaluations conducted by the DPS have identified that many home remodeling-renovation projects represent opportunities for energy efficiency improvements. Whether it's the installation of new lighting and/or appliances, replacement windows, or a kitchen remodel, these renovation projects offer the potential for a number of lost opportunity transactions that can improve the energy efficiency of the home. Efficiency Vermont's plans for 2004 include the development of services, in combination with customer education and incentives, to capture these potential lost-opportunities. This service development will involve working with remodeling/renovation contractors, do-it-yourself homeowners and building suppliers. A central concept is to promote and provide incentives for "bundles" of ENERGY STAR qualified lighting, appliances and building products (insulation, windows, etc.). It is anticipated that this will effectively encourage residential property owners to expand the range of efficiency measures installed as part of a remodeling/renovation project.
- **ENERGY STAR Central Air Conditioning and High Efficiency Furnace Fan Motors** - As noted in the plans for the Residential New Construction services, market information shows that an increasing number of Vermont households are installing central air conditioning systems. Similarly, a significant number of forced air heating systems are installed either upon equipment failure or as part of an upgrade project. Both situations represent an opportunity to capture an energy efficiency improvement that would otherwise be a lost opportunity. Therefore, in conjunction with the residential new construction service and working in with the HVAC trade allies that serve both the existing home and new construction markets, Efficiency Vermont will introduce a service of education and incentives to encourage the installation of ENERGY STAR central air conditioning and forced air furnaces utilizing high efficiency fan motors.

## **D. RESIDENTIAL NEW CONSTRUCTION**

Efficiency Vermont's primary objectives in the residential new construction market in 2004 are to:

- increase the market share for ENERGY STAR Homes;
- increase the energy savings potential for each completed home; and
- reduce costs through increased operational efficiencies.

Efficiency Vermont's approaches for increasing the market share will emphasize improving the completion rate for enrolled homes and increasing enrollments and participation by small volume builders and remodeling contractors, i.e., builders and contractors who build 1-4 homes per year.

Efficiency Vermont will also continue to provide efficiency services to assist builders and buyers in creating homes that are affordable, comfortable, durable, healthy, resource efficient, safe, and valuable, and models for national best practice. These efficiency services include technical assistance, performance testing, and financial incentives to builders, buyers, and/or developers.

We will continue our highly successful collaborative relationship with Vermont Gas Systems to deliver a fully-integrated service to the portion of the State served by Vermont Gas.

Based on market evidence that a significant number of new home buyers are choosing to install central air conditioning systems, Efficiency Vermont's residential new construction service will strive to promote greater awareness of ENERGY STAR qualified air conditioning equipment, including possible additional financial incentives for their installation. Similarly, based on technical evidence that higher-efficiency furnace fan motors provide cost effective savings, Efficiency Vermont will enhance the current design of this effort to encourage customers installing forced air heating systems to install ENERGY STAR qualified equipment that utilizes high efficiency furnace fan motors.



## V. REQUEST FOR CARRY-OVER OF FUNDS

Efficiency Vermont will not be making a request for carryover of unspent Contractor Energy Efficiency Charge (EEC) Funds from Year 2003 to Year 2004. In accordance with Attachment J, Paragraph 11 of the Vermont Energy Investment Corporation Contract with the Vermont Public Service Board, Efficiency Vermont will not need to make a formal carryover request for Year 2003 funds. Paragraph 11 states that: "Such requests to carry forward any anticipated unspent *Contractor EEC Funds* shall be required only if the unspent *Contractor EEC Funds* for a given year are greater than 5% of the total *Contractor EEC Funds* available in that year; if the unspent *Contractor EEC Funds* for 2003 and 2004 are less than 5% of the total *Contractor EEC Funds* available in that particular year, the unspent *Contractor EEC Funds* shall automatically be carried forward to the next year". Efficiency Vermont's current estimate is that total unspent *Contractor EEC Funds* for 2003 will be less than 5% of the total *Contractor EEC Funds* available for Year 2003. As in past years, total unspent funds for the current year will not be available until February 2004. If, in February 2004, Efficiency Vermont's final unspent *Contractor EEC Funds* for 2003 turn out to be greater than 5%, Efficiency Vermont will make a request at that time to carry over such funds for use in Year 2004.



**VI. Annual Plan 2004 Budget**  
For the Period January 1, 2003 through December 31, 2005

	<u>Estimate for Year 2003</u>	<u>Estimate for Year 2004</u>	<u>Estimate for Year 2005</u>	<u>Three-Year Budget</u>
<b><u>Services and Initiatives</u></b>				
Business Sector	\$7,881,808	\$8,416,935	\$8,441,795	\$24,740,538
Residential Sector	<u>\$5,293,904</u>	<u>\$5,425,574</u>	<u>\$5,516,728</u>	<u>\$16,236,206</u>
<b>Total Services and Initiatives</b>	<b><u>\$13,175,712</u></b>	<b><u>\$13,842,509</u></b>	<b><u>\$13,958,523</u></b>	<b><u>\$40,976,744</u></b>
<b><u>Supporting Services</u></b>				
Administration	\$137,717	\$102,382	\$106,477	\$346,576
Information Technology	\$380,054	\$494,078	\$492,797	\$1,366,929
<b>Total Supporting Services</b>	<b><u>\$517,771</u></b>	<b><u>\$596,460</u></b>	<b><u>\$599,274</u></b>	<b><u>\$1,713,505</u></b>
Operations Fee	<u>\$198,556</u>	<u>\$209,365</u>	<u>\$211,088</u>	<u>\$619,009</u>
<b>Sub-Total Prior to Performance-Based Fee</b>	<b><u>\$13,892,038</u></b>	<b><u>\$14,648,334</u></b>	<b><u>\$14,768,885</u></b>	<b><u>\$43,309,257</u></b>
Performance-Based Fee	<u>\$410,000</u>	<u>\$410,000</u>	<u>\$460,000</u>	<u>\$1,280,000</u>
<b>TOTAL ESTIMATED COSTS INCLUDING PERFORMANCE-BASED FEE</b>	<b><u>\$14,302,038</u></b>	<b><u>\$15,058,334</u></b>	<b><u>\$15,228,885</u></b>	<b><u>\$44,589,257</u></b>

**Note:** Annual budget components are only provided for information purposes only. It is agreed by the parties that the *Contractor* will operate under a total three-year budget for each of the above line items.